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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/817,602	03/26/2001	Mark John Anderson	ROC920000326US1	7819

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EXAMINER

PARDO, THUY N

ART UNIT	PAPER NUMBER
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2175

DATE MAILED: 06/18/2003

3

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

09/817,602

Applicant(s)

ANDERSON ET AL.

Examiner

Thuy Pardo

Art Unit

2175

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 March 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-22 and 24-49 is/are rejected.
- 7) ☒ Claim(s) 7 and 23 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 03.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

1. Claims 1-49 are presented for examination.

Claim Rejections - 35 USC § 102(b)

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-6, 8-22, and 24-49 are rejected under 35 U.S.C. § 102(b) as being clearly anticipated by **Bakuya et al.** (Hereinafter "Bakuya") US Patent No. 5,680,614.

As to claim 1, Bakuya teaches the invention substantially as claimed, comprising:

a status value indicative of whether the trigger definition is operative or inoperative [the operation mode specified in the trigger definition are the same and does not execute any trigger execution when they are not the same, ab];

a type value indicative of whether the trigger definition is self-referencing [a triggered operation based on the reference constraint, ab]; and

at least one dependent object having a dependency relationship with the trigger definition [a triggered operation based on the relations among the system tables, ab].

As to claim 2, Bakuya teaches the invention substantially as claimed. Bakuya further teaches that the object is a table [objects “section” or “employee” are tables, see fig. 7B, 7C].

As to claim 3, Bakuya teaches the invention substantially as claimed. Bakuya further teaches that the at least one dependent object is one of a table, a physical file, a collection, a schema, a library, a view, a logical file, an index, a user-defined function, a user-defined type, an alias and a procedure [a collection of records, fig. 7B, 7C; col. 10, lines 8-18].

As to claim 4, Bakuya teaches the invention substantially as claimed. Bakuya further teaches that the trigger definition information further comprises a trigger definition name and an SQL trigger statement area [fig. 10-11].

As to claim 5, Bakuya teaches the invention substantially as claimed. Bakuya further teaches that status value is changed from an operative setting to an inoperative setting if the object is modified and if the type value indicates that the trigger definition is self-referencing [col. 10, lines 29-57].

As to claim 6, Bakuya teaches the invention substantially as claimed. Bakuya further teaches that status value is changed from an operative setting to an inoperative setting if the at least one dependent object is modified [col. 9, lines 33-40].

As to claim 8, Bakuya teaches the invention substantially as claimed. Bakuya further teaches a CREATE TRIGGER statement containing the at least one dependent object; and a dependent object area for the at least one dependent object [fig. 5A-5C].

As to claim 9, Bakuya teaches the invention substantially as claimed. Bakuya further teaches that the dependent object area is a list containing the at least one dependent object [fig. 7A].

As to claim 10, Bakuya teaches the invention substantially as claimed. Bakuya further teaches that the dependent object area specifies a location of the at least one dependent object [fig. 7A].

As to claim 11, Bakuya teaches the invention substantially as claimed. Bakuya further teaches (a) receiving an I/O event affecting an object [10B-11].

As to claim 12, Bakuya teaches the invention substantially as claimed. Bakuya further teaches that (b) and © are repeated for each of a plurality of triggers defined on the object [fig. 10B].

As to claim 13, Bakuya teaches the invention substantially as claimed. Bakuya further teaches that the I/O operation is one of a rename operation, a move operation, a restore operation and any combination thereof [fig. 10B].

As to claim 14, Bakuya teaches the invention substantially as claimed. Bakuya further teaches that (b) comprises examining a value in a trigger definition entry associated with the object.

As to claim 15, Bakuya teaches the invention substantially as claimed. Bakuya further teaches that © comprises changing a value in a trigger definition entry associated with the object [fig. 9].

As to claim 16, Bakuya teaches the invention substantially as claimed. Bakuya further teaches that (b) comprises examining a first value in a trigger definition entry associated with the object and wherein © comprises changing a second value in the trigger definition entry [col. 10, lines 22-27; fig. 9].

As to claim 17, Bakuya teaches the invention substantially as claimed. Bakuya further teaches (b) determining whether the object has a dependency relationship with at least one trigger of the plurality of triggers [col. 10, lines 29-34].

As to claim 20, Bakuya teaches the invention substantially as claimed. Bakuya further teaches that determining whether the object has a dependency relationship comprises querying a system catalog with at least one of a name for the object “section”, “employee”, fig. 8B] and a library for the object [libraries “tables”, “view-table-usage”, fig. 8B].

As to claim 21, Bakuya teaches the invention substantially as claimed. Bakuya further teaches that determining whether the object has a dependency relationship comprises querying a system catalog with at least one of a name for the object and a library for the object and wherein the system catalog is populated with object dependency information contained in the trigger definition entry [fig. 7B-7C].

As to claims 18, 19, 22, 24, 40-44, 46, and 48, all limitations of these claims have been addressed in the analysis above, and these claims are rejected on that basis.

As to claims 25-30, all limitations of these claims have been addressed in the analysis of claims 11-16 above, and these claims are rejected on that basis.

As to claims 31-38, all limitations of these claims have been addressed in the analysis of claims 17-24 above, and these claims are rejected on that basis.

As to claim 39, Bakuya teaches the invention substantially as claimed, comprising a signal bearing medium containing a database management program [inherent in the system] which, when executed by at least one processor, performs a method of maintaining integrity in a database [12 of fig. 1] comprising a plurality of triggers defined on at least one of a plurality of tables [col. 10, lines 29-34; fig. 7], the method comprising: upon receiving a database command to affect a database object [requested manipulation, col. 5, lines 35-40], determining whether at least one dependent entity is dependent on the database object; and if the least one dependent entity is dependent on the database object and if the database command is a first command type [fig. 5A-5C], leaving the database object and the at least one dependent entity unaffected by the database command [inherent in the system].

As to claim 45, Bakuya teaches the invention substantially as claimed. Bakuya further teaches that the first command type is a RESTRICT command [col. 9, lines 18-32; col. 10, lines 22-27].

As to claim 47, Bakuya teaches the invention substantially as claimed. Bakuya further teaches that the second command type is a CASCADE command [fig. 10; col. 11, lines 14-22].

As to claim 49, Bakuya teaches the invention substantially as claimed. Bakuya further teaches that the third command type is a DEFAULT CASCADE command [col. 9, lines 50-56].

Allowable Subject Matter

4. Claims 7 and 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

As to claim 7, a CREATE TRIGGER statement containing the at least one dependent object; and a dependent object area specifying a location of the at least one dependent object according to a dependent object name offset from a beginning of the CREATE TRIGGER statement, a dependent object name length, a dependent object library offset from the beginning of the CREATE TRIGGER statement and a dependent object library length, taken together with other limitations of claim 1 was not disclosed by the prior art of record.

As to claim 23, Bakuya teaches the invention substantially as claimed. Bakuya further teaches that determining the table on which the at least one trigger is defined comprises querying a first system catalog with a trigger name and a trigger library for the at least one trigger and wherein determining whether the object has a dependency relationship comprises querying a second system catalog with at least one of an object name and an object library for the object, taken together with other limitations of claim 17 was not disclosed by the prior art of record.

5. Further references of interest are cited on Form PTO-892 which is an attachment to this office action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thuy Pardo, whose telephone number is (703) 305-1091. The examiner can normally be reached Monday through Thursday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dov Popovici, can be reached at (703) 305-3830.

The fax phone number for the organization where this application or proceeding is assigned are as follows:

(703) 746-7238 (After Final Communication)

(703) 746-7239 (Official Communication)

(703) 746-7240 (For Status inquiries, draft communication)

and/or:

(703) 746-5616 (*Use this Fax#, only after approval by Examiner, for "INFORMAL" or "Draft" communication. Examiner may request that a formal/amendment be faxed directly to them on occasions*).

Any inquiry of a general nature of relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

7. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 308-9051, (for formal communications intended for entry)

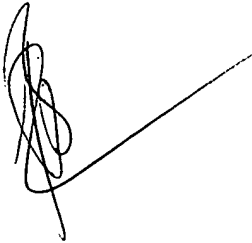
Or:

(703) 308-5359, (for informal or draft communications, please label

"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington.

VA., Sixth Floor (Receptionist).

A handwritten signature in black ink, consisting of a series of loops and a long, sweeping horizontal line extending to the right.

Thuy Pardo
June 12, 2003